The Sharing Economy: Friend or Foe?

Panel

Michel Avital
Copenhagen Business School
Copenhagen, Denmark
michel@avital.net

John M. Carroll
Penn State University
State College, PA, USA
jcarroll@ist.psu.edu

Anders Hjalmarsson
Viktoria Swedish ICT
Göteborg, Sweden
anders.hjalmarsson@viktoria.se

Natalia Levina
New York University
New York, NY, USA
nlevina@stern.nyu.edu

Arvind Malhotra
University of North Carolina
Chapel Hill, NC, USA
Arvind_Malhotra@kenan-flagler.unc.edu

Arun Sundararajan
New York University
New York, NY, USA
asundara@gmail.com

Abstract

The sharing economy is spreading rapidly worldwide in a number of industries and markets. The disruptive nature of this phenomenon has drawn mixed responses ranging from active conflict to adoption and assimilation. Yet, in spite of the growing attention to the sharing economy, we still do not know much about it. With the abundant enthusiasm about the benefits that the sharing economy can unleash and the weekly reminders about its dark side, further examination is required to determine the potential of the sharing economy while mitigating its undesirable side effects. The panel will join the ongoing debate about the sharing economy and contribute to the discourse with insights about how digital technologies are critical in shaping this turbulent ecosystem. Furthermore, we will define an agenda for future research on the sharing economy as it becomes part of the mainstream society as well as part of the IS research repertoire.

Keywords: Sharing economy, Collaborative economy, Collaborative platforms, Collaborative technologies, Disruptive innovation, Economic impact, Social impact

Introduction

Enabled by network technology and fueled by the ubiquity of mobile devices and social media (Benkler 2006), the sharing economy is spreading rapidly worldwide in a growing number of industries and markets (Owyang et al. 2013). In the past few years, the sharing economy has frequently made headlines and the sentiment of the discourse ranges from euphoric enthusiasm to cautionary frenzy. For example, regulatory challenges and threats of litigation to Airbnb hosts are frequently in the news, yet Airbnb is growing rapidly and over 25 million guests have stayed in one of their million listings in 34,000 cities around the world. Should we think of Airbnb as a friend or foe? In the same vein, Uber is frequently charged with unfair pricing practices and worker-related litigation but a recent study shows that its active driver base has more than doubled every six months for the last two years (Solomon 2015). Should we think of Uber as a friend or foe? The days in which the sharing economy seemed emergent and marginal (Gansky 2010; Botsman and Rogers 2011) now seem far away. Yet, in spite of the media hype, how much do we really know about the sharing economy? With the abundant enthusiasm about the economic benefits that the sharing economy can unleash and the weekly reminders about its dark side, further examination is required to determine the potential scope and benefit of the sharing economy while mitigating its undesirable side effects.

Sharing practices are certainly not new; they are the foundation of community life and human organization. Yet, the rapid exponential growth and global reach of successful sharing economy related ventures is unparalleled (Avital et al. 2014.) Companies like Kickstarter, Airbnb, Lyft, Etsy, and BlaBlaCar are just a few shining stars in a galaxy of internet-based platforms that enable a new economy, one that is based on the exchange of goods and services between individuals that disintermediate traditional commercial channels and increase the impact of excess resources. The physical-world industries most visibly affected thus far are accommodation, transportation and retailing, although early examples from the healthcare (for example, Heal and Cohealo) and energy (for example, Mosaic) sectors suggest other industries will follow.

The disruptive nature of this phenomenon in the affected industries has drawn mixed responses ranging from active conflict to adoption and assimilation. For example, while taxi drivers unions in Paris staged violent demonstrations against Uber, many of them also adopted similar apps like eCab in an attempt to emulate the passenger experience that is provided by Uber. Similarly, governments have also displayed mixed responses. While Uber, Lyft and Airbnb are under continuous pressure by local governments to restrain their predatory practices, recent reports from government chartered taskforces in the UK, Netherlands, Denmark and Finland recognize the merit of the sharing economy and recommend the development of sharing-friendly municipal zones. The debate about the future prospects and nature of the sharing economy is ongoing and we can contribute to the discourse with our deep understanding of the relationship between information, technology and people.

Positions and Exploration

Building on the inherent dialectics in the environment response to the sharing economy, we will explore and debate the potential prospects of the sharing economy, its possible effects on the economy and social order, how information technology is likely to play a role in enabling peer-to-peer sharing, and how information technology may evolve in response to the market and the social forces that drive this emerging ecosystem. We will attempt to provide a framework that can help future examination and development of the sharing economy as it grows and becomes part of the mainstream economy. Following an introduction, we envision a panel discussion on the sharing economy that explores a diverse range of related economic, social, and technological implications and can consolidate them into a rich repertoire in the context of information technology. Discussion will cover, but is not limited to, the following:

Sharing Economy? The Future of Crowd-Based Capitalism (Arun Sundararajan)

The set of changes we place under the umbrella of the "sharing economy" will shape the future of capitalism. Therefore, over the coming years, there are key policy choices to be made that will dictate what shape this phenomenon will take. Current research (e.g., Fraiberger and Sundararajan 2015) shows that there is significant potential for inclusive growth as we move away from institution-driven and towards

platform-based exchange. Consistent with trends we have seen for digital media and online retailing, there is also a shift toward the platforms themselves regulating exchange, which suggests that we should promote and prefer choosing self-regulatory approaches as peer-to-peer exchange scales rather than allowing these to emerge de facto (Cohen and Sundararajan 2015). The regulatory changes induced by the sharing economy are connected to a broader trend of expansion in 'private power' induced by other digital platforms. Further, there are two competing narratives about the future of the workforce: of the 'empowered microentrepreneur' and the 'race to the bottom.' Both are likely to be true in part, but providing an analytical answer as to which one dominates requires expanding our discussion about how digital technology impacts the workforce well beyond skill-biased technical change (Card and DiNardi 2002), task programmability (Levy and Murnane 2004) and offshoreability (Blinder 2007). The discussion will also outline how metrics relating to the 'incubation potential' chosen by platforms, the ownership structures they evolve into having, and the short-term categorization of workers under labor law will have a critical impact, and how the creation of a social safety net for the freelance economy remains a challenge under any future scenario (Sundararajan 2014a). Finally, the discussion will turn to how the true promise of a crowd-based future of capitalism may lie in its effects on inequality, trust and human connectedness.

Collaborative Capabilities for Sharing Economy Enablers: Competitive Necessity or a "Nice to Have" (Natalia Levina)

In 1987, Malone, Yates, and Benjamin predicted that economic activity would shift from firms to markets because digital technology can be used to reduce transaction and coordination costs in the marketplace, making firm governance mechanisms less attractive. Following this argument, businesses enabling the sharing economy through digital platforms must solve two problems: a cooperation problem and coordination problem. They must build trust and contracting mechanisms that would prevent somebody from racking an apartment rented through Airbnb (cooperation problem) and make sure that an Uber driver arrives at the right destination at the right time to pick up a passenger (coordination problem). I will argue, based on subsequent writing on the role of firms in economic activity (e.g., Kogut and Zander 1996), that there is one other problem that firm-based organizing addresses, and that is the "collaboration problem" — the integration of diverse tacit knowledge so as to enable learning and produce innovation. Firms usually enable this by creating shared practices that result in joint identity, language, routines as well as socialization processes for newcomers to learn such practices. These practices are most vividly observed in technology firms like Apple and Google, but their value is also crucial in hospitality and other non-tech services (e.g., Baden-Fuller and Winter 2008). Competition among some digitally-enabled firms is already driven by these firms' abilities to enable collaboration between their own employees developing digital platforms and platform participants as well as, in some cases, collaboration among the participants. We see strong evidence of this among businesses enabling sharing of content (e.g., Wikipedia), expertise (e.g., Open Source Software) and ideas (e.g., OpenIDEO) (Fayard et al. 2015). The jury is still out about other sharing economy businesses would need in order to develop equally powerful collaborative capabilities. For example, is the observation that Uber is less collaborative in defining its practices and exchange terms compared to Airbnb (Sundararajan 2014b) an artifact of its founders' identity, a function of the type and nature of services each firm is enabling, or a variation in practices that will be weeded out by competitive pressures over time?

The Diverse Facets of Sharing (Anders Hjalmarsson)

The mobility sector provides a rich arena for experiments with business models that stem from the sharing economy. Urban environments provide many different challenges for transportation in terms of sustainability (e.g., CO2, air pollution), accessibility (e.g., congestion) or economic efficiency. Existing traffic networks often operate at their limits and need to be extended or improved to meet the increasing mobility needs of an increasing number of individuals. The assumption is that stakeholders in urban environments have to use existing resources and infrastructure more efficiently to improve personal mobility and to reduce congestion and pollution at the same time (Bie et al. 2012). The sharing of transportation services is growing rapidly in the wake of the Internet and Smartphone revolution (Owyang et al. 2013), in North America alone estimation 2012 estimated the number of ride-matching services to 638 (Nelson & Shaheen 2012). Especially, smartphone based information technology is today used to organize the capacity and requests among peers, based on different mobility patterns (Andersson

et al. 2013). Within the mobility sector the sharing of transportation services can be grouped into different initiatives that in turn are based on different rationales and motives. For example, peer-to-peer mobility could be private initiatives based on global commercial interests (e.g. Uber, Zipcar) or publicly financed initiatives implemented to improve the governmental transport service provided to citizens (e.g. the Avego WeGo Rideshare project in the San Francisco Bay Area, administered by the Metropolitan Transportation Commission (MTC)). A third growing class of peer-to-peer platforms is community enabled mobility services; that is, services developed by peers without a commercial interest connected to the initiative (e.g. Skjutsgruppen, a local Swedish community that utilizes Facebook to organize peer-to-peer mobility). Finally, some mobility platforms are becoming embedded as additional features in other platforms (e.g. The GM in car system integration of the RelayRides peer-to-peer car rental portal, or the possibility to offer rides in carpool vehicles, or the integration of Flinc in Navigon). A discussion about the sharing economy as friend or foe requires that we view sharing of services in the mobility sector as a multi-faceted phenomenon. The evolving sharing industry comprises different initiatives that are based on different grounds and motives. In order to pinpoint how we can benefit from sharing practices as well as risks we have to outline and explore the diverse facets that different peer-to-peer mobility initiatives possess. In this panel we will investigate and discuss the core features of facets for different peer-to-peer mobility initiatives in terms of – for example – motives, value propositions, incentives, to achieve critical mass and IS strategy.

Confusion, Skepticism, and a Great Potential (John M. Carroll)

I am a skeptical friend of the sharing economy. I have researched timebanking during the past several years, and become intrigued by how a growing and transformative worldwide movement could be so at odds with fundamental economic assumptions and models. Timebanking is based on service co-production, that is, it focuses on the equitable exchange of services that require active and reciprocal participation by "provider" and "recipient", and are evaluated strictly on the time to co-produce the service (Glynos & Speed, 2012). This does not look anything like service delivery based on market-determined prices. I have started to wonder whether something transformative is happening to the overall exchange of value (Carroll & Bellotti, 2015). Still there are many challenges in the sharing economy: Metaphors like "banking" confuse participants about the nature of these new service models (Bellotti et al. 2014); and indeed, administrators of these services view them far more ideologically/altruistically than do members (Bellotti et al. 2015; Shih et al. 2015), and no timebanking technology infrastructure explicitly recognizes and supports service co-production (Carroll, 2013; Han et al. 2015).

The Dark Side of the Sharing Economy (Arvind Malhotra)

There is no doubt that the burgeoning sharing economy has benefited producers and consumers. From a macro-economic perspective the use of excess capacity and the micro-entrepreneurialism is certainly a societal gain. However, there are several dark sides of the sharing economy that need to be ironed out or thought through before the sharing economy becomes the real economy (Malhotra and Van Alstyne 2014.) Sharing companies like Airbnb and Uber also tend to run afoul of international licensing laws in the foreign markets they expand rapidly into, e.g., Barcelona charged Airbnb with violating tourism laws. Beyond just transgressing against local laws, sharing economy companies struggle to protect their consumers in countries where governance is weak and these companies are not able to vet their sharers (drivers, renters, etc.). As is the recent case in which an Indian woman alleged that an Uber driver raped her. Or, when an AirbnB America user was bitten by the host's dog in Argentina and AirbnB declined to accept liability and the user's primary insurance coverage did not extend to Argentina. Such cases demonstrate that the sharing economy has several kinks yet to be worked out, especially when these sharing companies extend their operations internationally. These dark sides can easily derail the promise of the sharing economy. In the worst-case scenario the drawbacks taken as a whole can end up being a lose-lose situation. In this part of the panel discussion we will aim to highlight the key – socio, economic, human and legal - dark sides of the sharing economy, building on the following discussion points: What if the providers do not allow a certain set of people to utilize their services? Will we have a reenactment of segregation? Who is to intercede if the consumers and/or producers bludgeon each other unfairly through the use of the review- based system? Can reviews be "fixed" to mislead one side or to "ostracize" the other side? What if a sharing economy becomes a massive scheme to avoid paying taxes? What is the macroeconomic impact of such a dark side? Much of "open innovation" based on sharing of intellectual

resources is dependent on individuals sharing their ideas or performing work "on the cheap". Who is to protect the rights of these freelancers? If the asset of the producing sharer is further shared with others by a consumer sharer? What if this second-degree sharing causes more damage to the assets of the providing sharer? While a sharing economy is looked upon as a transaction between sharers, what are the implications for those near the sharers but not sharing themselves? And finally, what is the macroeconomic impact of loss of jobs at the bottom of the pyramid due to a sharing economy?

Discussion Format

The panel is designed to stimulate an engaging discussion that appeals to a broad audience and generates lively debate. We have assembled a team of six panelists who have significant experience conducting research about and related to the sharing economy and associated topics of organizational boundaries, open innovation and platforms. Overall, the panel will be structured so that about a third of the panel time will remain for the audience to participate in posing questions and engaging in debate. The panel will follow a roundtable discussion format with two rounds of related questions. Panelists will be asked to draw on their rich experience in the field and their intimate knowledge of various flavors of the sharing economy to answer two initial questions, as follows:

- What is the sharing economy and what are its key underlying business models?
- What are the potential economic and social rewards and risks of the sharing economy? Is it a friend or foe?

After the discussion induced by these framing questions and following the current debate in the sharing economy discourse, we will focus on the implications of the sharing economy for IS research and for the prospects of our community at large. Questions for this portion of the panel discussion are as follows:

- To what extent is the sharing economy intertwined with advances in information technology, and to what extent is it driven by other economic and social forces?
- Where are the burning research questions that the IS community should address with regard to the sharing economy?

The panel will follow a roundtable discussion format. Michel Avital will serve as the moderator of the panel discussion, taking 5 minutes at the beginning to outline the motivation for and objectives of the panel, and to introduce the panelists.

Following an introduction by the moderator, the panelists will be given about 20 minutes to address either or both of the two initial questions. At this point, the audience will be invited to voice their opinion in response to the panelists' remarks or question them about the topic. The topic is in the news daily and we expect that many in the crowd will have something to contribute to the discussion. About 15 minutes will be allotted for the discussion.

Next, we will move to the forward-looking phase of the discussion. Panelists will be asked to explore the link between the sharing economy and IS research. Panelists will be given about 20 minutes. Questions from the audience will again be solicited in the final 25-30 minutes. The moderator will summarize the main points and facilitate audience participation.

In summary, we seek to evoke provocative ideas and generative thinking that can initiate research on the sharing economy in the IS discipline and perhaps also contribute to the general discourse thereof. At minimum, we hope that the panel will stimulate new insights about the modus operandi of the sharing economy and the potential role of information technology in its development.

Participants

Michel Avital is Microsoft Chair and Professor of IT Management in Copenhagen Business School. Digital innovation is the leitmotif of Michel's work that focuses on examining the crossroads of information, technology, and people. Building on positive modalities of inquiry, his research focuses on information and organization with an emphasis on the social aspects of information technologies. He has published over 100 articles on topics such as big data, open data, open design, generative systems design,

creativity, innovation, green IT and sustainable value. He is an editorial board member of nine leading IS journals and served in various organizing capacities in major international conferences such as ICIS, AOM, ECIS and other topical conferences. Michel is an advocate of openness and an avid proponent of cross-boundaries exchange and collaboration.

John M. Carroll is Distinguished Professor of Information Sciences and Technology at the Pennsylvania State University. His research is in methods and theory in human-computer interaction, particularly as applied to Internet tools for collaborative learning and problem solving, and design of interactive information systems. Carroll serves on several advisory and editorial boards for journals, handbooks, and series. He is editor of the Synthesis Lectures on Human-Centered Informatics. Carroll has received the Rigo Award and the CHI Lifetime Achievement Award from ACM, the Silver Core Award from IFIP, the Goldsmith Award from IEEE. He is a fellow of AAAS, ACM, IEEE, the Human Factors and Ergonomics Society, and the Association for Psychological Science. In 2012, he received an honorary doctorate in engineering from Universidad Carlos III de Madrid.

Anders Hjalmarsson holds a Senior Researcher's position at Viktoria Swedish ICT, Gothenburg, Sweden and an Assistant Professor position at University of Borås, Sweden. His research includes case study, survey and design science research on innovation of digital technology, mainly within the transport and vehicle industry, based on open platforms, novel processes and collaborative approaches. Anders received his PhD in Information Systems Development from Linköping University in 2009. He has since then written 30 conference and journal papers addressing digital services for smart mobility, peer-to-peer mobility, digital innovation and open data services. Anders' work has since 2011 generated grants in excess of $1 million; from European, National and Regional research agencies.

Natalia Levina has received her PhD in Information Technology from MIT's Sloan School of Management, is an Associate Professor and holds the Toyota Motor Corporation Term Chair at New York University's Stern School of Business. Her main research interest is in understanding how people span organizational, professional, cultural and other boundaries in order to generate innovative ideas and products. She studies open innovation, crowdsourcing, and global sourcing of expertise, content, and ideas. Currently, her NSF VOSS-funded four-year research project focuses on understanding boundary-spanning practices used for open innovation, comparing those produced through traditional firm-based organizing with those produced through digitally-mediated crowdsourcing platforms. She often uses qualitative methods and critical theory in her research to unpack how issues of understanding and incentives are intertwined in everyday work practices.

Arvind Malhotra is Professor of Strategy & Entrepreneurship and T.W. Lewis Distinguished Scholar at the University of North Carolina's Kenan-Flagler Business School. His research projects include studying successful innovative structures, adoption of innovative technologies, and knowledge management in interorganizational contexts. Arvind's work has been published in leading journals such as Harvard Business Review, Sloan Management Review, MIS Quarterly, Information Systems Research, Communications of the ACM, Journal of Service Research, and Journal of Academy of Marketing Science. He has received research grants from the SIM Advanced Practices Council, Dell, Carnegie-Bosche Institute, National Science Foundation and the Marketing Sciences Institute. He received his PhD in business administration and his MS in industrial & systems engineering from the University of Southern California and his BE in electronics and communications engineering from the University of Delhi.

Arun Sundararajan is Professor and the Robert L. and Dale Atkins Rosen Faculty Fellow at New York University's Leonard N. Stern School of Business. His current interests include the governance of digital spaces, the sharing economy, online privacy, contagion in networks and digital pricing. His award-winning research has been published widely in journals that include *Management Science, ISR, MIS Quarterly, PNAS, Social Networks* and *Network Science*. His recent academic findings and expert views have been featured in *TIME Magazine, the New Yorker, the New York Times, the Wall Street Journal, Fast Company* and *Forbes*, and he has been an invited expert on *Bloomberg, CNN, BBC, CNBC, NPR, TechCrunch* and numerous international news channels. Over the last five years, he has published over twenty-five op-eds for outlets that include *Harvard Business Review, the Financial Times, The New York Times, The Financial Times, Le Monde, Wired* and *Bloomberg*.

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